Dart Aerospace Ltd.

Date: Wednesday, 3/8/2006 10:38:11 AM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	**Drawing Name**	: SHUT-OFF VALVE SHAFT
Job Number	: 26115		
Estimate Number	: 12170		
P.O. Number	: N/A	**Part Number**	: D34703
This Issue	: 3/8/2006 **S.O. No.** : N/A	**Drawing Number**	: D3470 REV.A
Prsht Rev.	: NC	**Project Number**	: N/A
First Issue	: N/A **Type** : PURCHASED PARTS	**Drawing Revision**	: A
Previous Run	: N/A	**Material**	: N/A
Written By	: SEE COMMENT BELOW	**Due Date**	: 3/31/2006 **Qty:** 6 **Um:** Each
Checked & Approved By	: AR 06.03.08		
Comment	: est rev A 06.02.03 new issue EC		

10

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	OUTSIDE SERVICE	OUTSIDE SERVICES
	Comment: Sub-Contracting OUTSIDE SERVICES Issue P/O: 00000768 AR 06/03/09 Email or Ship DXF file to vendor Laser Cut per Dwg D3470 flat pattern D3470-3F AR 06/03/09 Material release note required	
2.0	D34703F	ARM
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s) ARM	
3.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure material certification is attached	4/3/27 (10)
4.0	QC6	DIMENSIONAL CHECK 06.03.28 12
	Comment: DIMENSIONAL CHECK	
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Deburr if necessary.	SAD 06.03.29 (12)

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** 06/03/30

QA: N/C Closed: _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:38:12 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services **Drawing Name:** SHUT-OFF VALVE SHAFT

Job Number: 26115 **Part Number:** D34703

Job Number:

Seq. #:	Machine Or Operation:	Description :
6.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	Dec03.29 (1)
7.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: ST439	C 06/03/29 (2)
8.0	DC	DOCUMENT CONTROL
	Comment: DOCUMENT CONTROL Inspection Level 21	06/03/30 (2)

Job Completion

C Dec03.29

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

QA: N/C Closed: _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

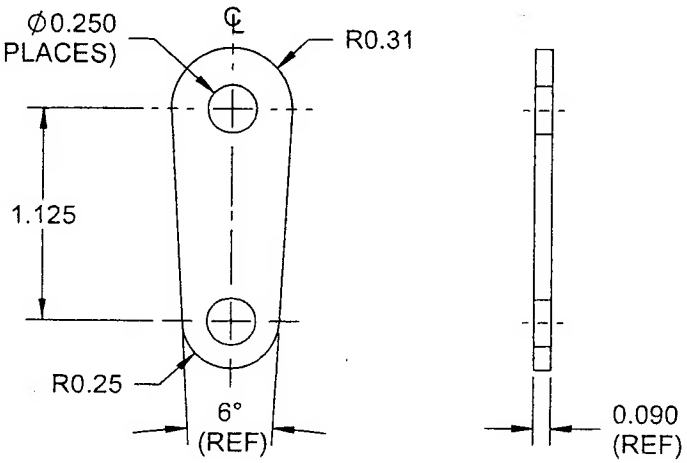
NOTE: Date & initial all entries

PRELIMINARY ISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3470	REV. A SHEET 3 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT	SCALE 1:1

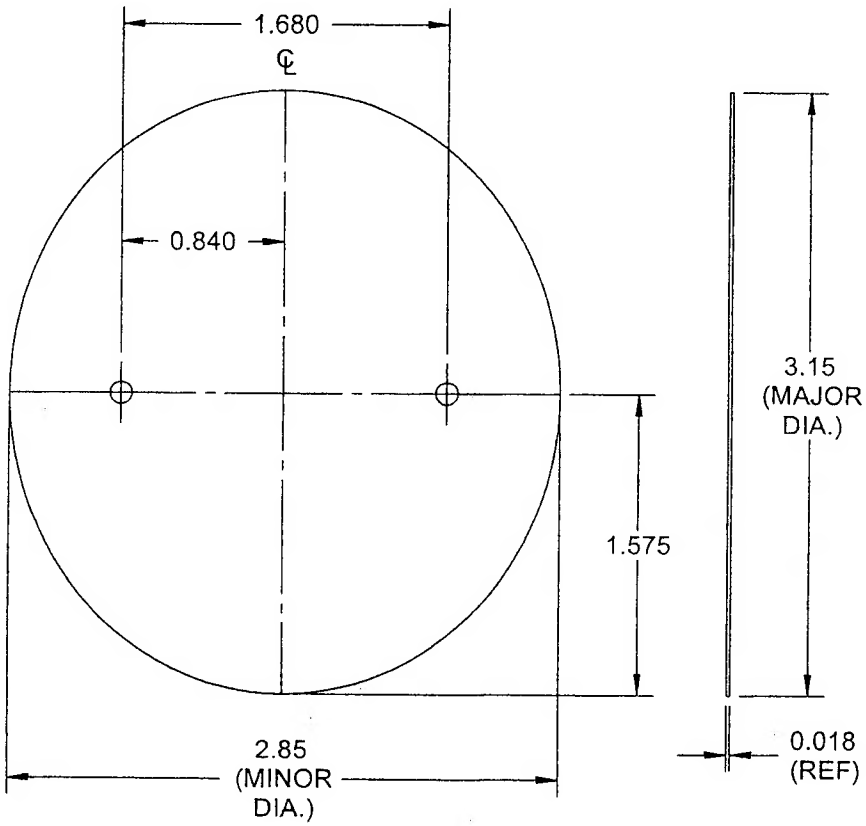
D3470-3 ARM

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 13 GAUGE SS (0.090 THICK) (REF. DART SPEC. M304S26GA)
2) ~~FINISH: NONE.~~



D3470-5 PLATE VALVE

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
2) FINISH: ELECTRO CHEMICALLY POLISH.



NOTES:

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

FAX 1 847 585 2500 CORUS ALUMINIUM

Corus Aluminium Walzprodukte G. .1
Postfach 100331 · D-56033 Koblenz

corus

INSPECTION CERTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA

PAGE: 2 / 03

NO.: 0879231 SERIAL-NO.:
PURCHASER: CORUS ALUMINIUM ROLLED PRODUCTS USA-A DIVIS SCHAUMBURG, IL 60173
ORDER NO. PURCH.: US-AIRCR.DEPOT-PRO
ORDER NO. MAN.: 83415
SPEC.: AMS4041+B209+QQ250/5
CUSTOMER PART NO.:
ITEM: 01 LOT: 102973 QUANTITY: 344
ALLOY/TEMPER: 2024 T3 ALCLAD 1230 PRODUCT: PLA
DIMENSIONS: 0.040 x 48.00 x 144.00 INS

Other tests:

Dimensional check: OK
Surface control: OK

Normative references:

BESTELLNORM/SPECIFICATION/NORME
AMS 4041P+ASTM B 209-04+AMS-QQ-A-250/5A SEP1998

Bend test:

L-direction LT-direction OK ST-direction

e G.
Koblenz

corus

RTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA

PAGE: 3 / 03

SERIAL-NO.:
ORUS ALUMINIUM ROLLED
RODUCTS USA-A DIVIS
CHAUMBURG, IL 60173
CUSTOMER PART NO.:

ORDER NO. PURCH.: US-AIRCR. DEPOT-PRO
ORDER NO. MAN.: 83415
SPEC.: AMS4041+BZ09+QQ250/5

THAT THE WHOLE OF THE SUPPLIES DETAILED HEREON HAVE BEEN
TESTED AND, UNLESS OTHERWISE STATED ABOVE, CONFORM IN ALL
ITH THE REQUIREMENTS OF THE SPECIFICATION, CONTRACT OR ORDER.

res:

nz, the 25.08.05 SW

G. Mettler
Quality Assurance

Corus Aluminium
Walzprodukte GmbH
Koblenz

MAR-23-2006 04:24 FROM:

TO:6049464153

P/N 062310 PO W23357

Corus Aluminium Walzprodukte G...rl
Postfach 100331 · D-56033 Koblenz

corus

INSPECTION CERTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA

NO.: 0879231 SERIAL-NO.: PAGE: 1 / 03

PURCHASER: CORUS ALUMINIUM ROLLED PRODUCTS USA-A DIVIS SCHAUMBURG, IL 60173

ORDER NO. PURCH.: US-AIRCR. DEPOT-PRO
ORDER NO. MAN.: 83415
SPEC.: AMS4041+B209+QQ2S0/5
CUSTOMER PART NO.:

ITEM: 01 LOT: 102973 ALLOY/TEMPER: 2024 T3 ALCLAD 1230 PRODUCT: PLA
QUANTITY: 344 DIMENSIONS: 0.040 x 48.00 x 144.00 INS

RESULTS:

Mechanical properties:

Spec. No.	Y.S. KSI	U.T.S. KSI	El. %
Min. LT:	39,0	59,0	15,0
Max. LT:			
001	40,6	59,6	17,9
002	40,6	59,8	18,7
003	40,5	59,8	17,7
004	40,8	59,6	18,1

Chemical composition: in %, remainder Al

	ALLOY CORE	ALLOY LINER	ALLOY LINER
ALLOY:	2024	1230 4	1230 4
CAST-NO.	5-05-2914	142166-1	142166-1
Si	0,028	0,12	0,12
Fe	0,123	0,26	0,26
Cu	4,526	0,002	0,002
Mn	0,634	0,010	0,010
Mg	1,436	0,003	0,003
Cr	0,001	0,001	0,001
Zn	0,011	0,005	0,005
Ti	0,0278	0,019	0,019
B	0,0006	0,002	0,002
Zr	0,0006		
Pb	0,0016	0,0011	0,0011
Ni	0,0059		